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ABSTRACT

The development and relationship of two dimensions of personality, self esteem and locus of control, were examined in a study of 763 fourth, eighth, and twelfth grade Indian and white children selected from 22 Oklahoma public schools. The students were given the Coopersmith Self-Esteem Inventory and Nowicky-Strickland Locus of Control Scale during the fall of the 1975-76 school year. Results indicated that Indian and white children did not significantly differ in their developmental level of self esteem until the junior high school grades. At that time Indian children were significantly lower in self esteem and this difference persisted through the high school grades. Concerning the development of locus of control, both groups tended to become more internal with age. (Internal control of reinforcement was the degree to which an individual believed his reinforcements were dependent upon his own behaviors; external controls were those forces he felt to be beyond his control, such as luck or chance.) White children perceived themselves as having more control over their actions. The only exceptions to this were found at the twelfth grade and only for males. Locus of control was significantly related to self esteem for both Indian and white children at all three grade levels. For twelfth grade students the relationship varied according to ethnicity; it was significantly stronger for Indians than whites. (DS)

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TO IMPROVING INDIAN EDUCATION

*LOCUS OF CONTROL AND SELF—ESTEEM IN INDIAN AND WHITE STUDENTS**

by

James C. Martin

Rotter (1966) identified the construct of internal-external control of reinforcement (I-E) as being the degree to which an individual believes his reinforcements are dependent upon his own behaviors (internality) or are controlled by forces beyond his control, such as luck or chance (externality). Researchers have subsequently attempted to relate locus of control to various personality variables. Externality has been correlated with low-ego strength (Erikson and Roberts, 1971) and poor personal adjustment (Warehime and Foulds, 1971). Lombardo, Fantasia, and Solheim (1975) found that externals exhibited less self-acceptance than internals while Baldo, Harris, and Crandall (1975) found that externals performed lower than internals on psychsocial developmental tasks. Overall, it appears that an external locus of control orientation is associated with negative personality characteristics while an internal orientation is related to positive personality characteristics.

A review of I-E research reflected an absence of studies which utilized children from different ethnic or cultural groups as subjects. Obviously, there is a need for research which examines the relationship between locus of control and personality adjustment in children from different ethnic groups. The purpose of the present study was to examine the relationship between locus of control and self-esteem in American Indian and white children. Ethnic differences in self-esteem and locus of control were also examined.

Historically, American Indian children have been found to be more rejected, depressed, and withdrawn than white children (Bryde, 1965). Splindler and Splindler (1957) found that Indians have serious doubts about their personal adequacy while Berry (1969) concluded that the Indian is plagued with feelings of alienation, anxiety, and inadequacy. Similarly, Coleman (1966) reported that Indians tend to view themselves as being inferior to whites on measures of self-concept. From these findings, it seems probable that Indian children would score lower than whites on measures of self-concept or self-esteem.

In terms of locus control, a review of the literature indicated that little is known about the development of this dimension of personality in Indian children. In comparing black and white children, Battle and Rotter (1963) found that lower-class blacks were more external than

*The present study was based on a more comprehensive review of Indian education in Oklahoma. See *Oklahoma Indian Education Needs Assessment*. Stillwater, Oklahoma: Oklahoma State University, College of Education, 1976.

lower-class whites. In another study, Graves (1961) found that blacks were more external than whites and that Indians were more external than blacks. In general, previous researchers (Nowicki and Strickland, 1973) have found that locus of control becomes increasingly internal with age and that internality relates positively to self-concept.

In the present experiment, it was predicted that white children would evidence higher self-esteem scores than Indian children. A second prediction was that the locus of control dimension would gradually become internal with age for both Indian and white children and that Indians would be more externally oriented than whites. Finally, it was predicted that internality would be positively related to self-esteem for both Indian and white children.

Methodology

The Sample. Subjects for the present study were selected from 22 public school systems in Oklahoma. Each of the schools had a high enrollment of American Indian children. An Indian student was defined as being one-quarter or more degree of Indian blood. In each school system, an equal proportion of Indian and white children were randomly selected from the fourth, eighth, and twelfth grades. The total sample consisted of 254 (135 Indians, 119 whites) fourth-grade students, 290 (149 Indians, 141 whites) eighth-grade students, and 219 (111 Indians, 108 whites) twelfth-grade students.

The Instruments. Self-esteem was measured by the short form of the Coopersmith Self-Esteem Inventory (Coopersmith, 1967). The short version of the Coopersmith Self-Esteem Inventory (CSEI) contains seven high esteem items ("I'm a lot of fun to be with") and eighteen low-esteem items ("I often wish I were someone else"). An individual's score is the sum of the number of high esteem items marked in the positive "Like Me" direction and the number of low-esteem items marked in the negative "Unlike Me" direction. The higher an individual's total score on the CSEI, the higher his subjective evaluation of himself.

Locus of control was measured by the Nowicky-Strickland Locus of Control Scale (Nowicki and Strickland, 1973). The Nowicki-Strickland Locus of Control Scale (NSLCS) consists of 40 questions which are answered either yes or no by placing a mark by each question. The construction of items for the NSLCS was based on Rotter's definition of the internal-external control of reinforcement. An individual's total score is the total number of items marked in the external direction. Thus, the higher an individual's total score, the more external is his locus of control orientation.

Collection of Data. In each school the randomly selected samples of Indian and white children were administered the CSEI and the NSLCS. The instruments were administered in group settings with no time limits. When necessary, the questions were read out loud to the

fourth-grade students. All students were tested during the fall term of the 1975-76 school year.

Results and Discussion

The initial hypothesis of the present study was concerned with differences in self-esteem between Indian and white children. It was predicted that white students would evidence higher self-esteem than Indian students. An analysis of the CSEI scores for Indian and white students revealed significant differences at the eighth and twelfth grades. The eighth-grade Indian students ($\bar{X}$ = 13.84, SD = 4.38) scored significantly lower than the eighth-grade white students ($\bar{X}$ = 15.17, SD = 4.65) on the CSEI ($t = 2.51$, $p < .01$ on a one-tailed test). Similarly, the twelfth-grade Indian students ($\bar{X}$ = 15.86, SD = 4.67) scored significantly lower than the twelfth-grade white students ($\bar{X}$ = 17.50, SD = 4.77) on the CSEI ($t = 2.59$, $p < .01$ on a one-tailed test). No significant difference in self-esteem was found at grade four. In terms of developmental trends, it seems that the present sample of elementary Indian and white students did not differ in their subjective evaluations of themselves. However, in the junior and senior high school grade levels Indian students evidenced lower subjective evaluations or self-esteem than did white students.

A second hypothesis of the present study was that the locus of control dimension would become more internal with age for both Indian and white children and that Indian children would be more externally oriented than white children. Table I presents the means and standard deviations for the Indian and white students' NCLCS scores by sex. From Table I it can be seen that Indian and white students' mean NSCLS scores decreased as the grade level increased. The lower the score on the NSCLS, the more internal the individual's locus of control orientation.

For Indian males, fourth-grade students were significantly more external than eighth-grade students ($t = 3.38$, $p < .01$ on a one-tailed test) and eighth-grade students were significantly more external than twelfth-grade students ($t = 6.23$, $p < .01$ on a one-tailed test). For white males, fourth-grade students were more external than eighth-grade students ($t = 5.07$, $p < .01$ on a one-tailed test) and eighth-grade students were more external than twelfth-grade students ($t = 3.55$, $p < .01$ on a one-tailed test). Similar results were found for Indian and white females. Fourth-grade Indian females were more external than eighth-grade Indian females ($t = 4.72$, $p < .01$ on a one-tailed test) and eighth-grade Indian females were more external than twelfth-grade Indian females ($t = 3.93$, $p < .01$ on a one-tailed test). Finally, fourth-grade white females were more external than eighth-grade white females ($t = 4.22$, $p < .01$ on a one-tailed test) and eighth-grade white females were more external than twelfth-grade white females ($t = 3.85$, $p < .01$ on a one-tailed test). In view of these findings, it appears that the locus of control dimension gradually becomes more internal

with increments in age. This developmental trend of becoming more internal with age seems to be present in both Indian and white children.

Hypothesis two also predicted that Indian children would be more externally oriented than white children. This prediction was tested for males and females at grades four, eight, and twelve. The results of the comparisons are presented in Table I. It can been seen from Table I that Indian males scored significantly higher than white males on the NDLCS at grades four and eight. No difference was found at grade twelve. The results imply that Indian males were more externally oriented than white males at grades four and eight. Table I also shows that Indian girls were more externally oriented than white girls at grades four, eight, and twelve.

A final hypothesis of the present study involved a proposed relationship betwen locus of control and self-esteem. It was predicted that internality would be positively related to self-esteem for both Indian and white children. In other words, internals should evidence higher subjective evaluations (self esteem) than externals. To examine the proposed relationship, Pearson Product-Moment correlation coefficients (r) were computed between the Indian and white students' CSEI and NSLCS scores at grades four, eight, and twelve. Table II shows the obtained correlation coefficients (r). It can be seen from Table II that locus of control was significantly related to self-esteem for both Indian and white children. This relationship was found at grades four, eight, and twelve. It should be noted that the NSLCS was scored in an external direction. Thus, a significant negative correlation coefficient between NSLCS and CSEI scores meant that a decrease in external control was associated with an increase in self-esteem. The results imply that internality was positively related to self-esteem for both Indian and white children.

After establishing that locus of control was related to self-esteem in both Indian and white children, a question arose regarding the strength of the relationship. More specifically, did the relationship between locus of control and self-esteem vary according to the ethnicity of the students? To answer this question, the correlation coefficients obtained from the Indian and white students' NSLCS and CSEI scores were tested for significant differences. Fisher's Z scores were computed from Indian and white students' correlation coefficients at grades four, eight, and twelve. The results of the comparisons are presented in Table II. It can be seen from Table II that the Fisher's Z value was not significant for grades four and eight. However, at grade twelve the relationship between locus of control and self-esteem was significantly stronger for Indians than whites. Thus, for twelfth-grade students, the relationship between locus of control and self-esteem varied according to ethnicity.

Conclusions

Previous research (Splinder and Splinder, 1957; Berry, 1969; and Coleman, 1966) has indicated that Indian children do not develop as well as white children, in terms of personal or psychological development. The present study examined the development of two dimensions of personality, self-esteem and locus of control, in Indian and white children. The study also attempted to identify how self-esteem was related to locus of control in children from both ethnic groups. From an analysis of the results from the present study, it was concluded that Indian and white children do not significantly differ in their developmental level of self-esteem until the junior high school grades. At the junior high school level, the Indian children are significantly lower than white children in terms of self-esteem and this difference in level of self-esteem persists throughout the high school grade levels. Perhaps a focus for future research should be the period of transition from elementary to junior high school. It should be noted that this transitional period correlates with the onset of adolescence and it could be that Indian and white children may differ in their reactions to adolescence.

Concerning the development of locus of control in Indian and white children, the following conclusions were formulated. First, both Indian and white children tend to become more internal with age. As a child becomes older, he apparently feels that his behavior is controlled more by himself than by others. This finding is consistent with previous research (Nowicki and Strickland, 1973). Second, white children perceive themselves as having more control over their actions than do Indian children. This difference was found at all three grade levels. The only exception to this was found at the twelfth grade and only for males. It seems that Indian and white children do differ in their locus of control orientation and this difference is evident by the time the students reach the fourth grade. Perhaps future research should specifically identify what factors influence the development of locus of control and determine if the contribution made by these factors is affected by ethnicity.

A final purpose of the present study was to determine if locus of control was related to self-esteem in Indian and white children. It was concluded that internality is positively related to self-esteem for both Indians and whites. This finding indicates that an internal locus of control orientation is associated with good mental health. It was further concluded that the strength of this relationship between locus of control and self-esteem is different for whites than Indians at the high school level. Future research should examine the possibility of developing an individual's internal locus of control orientation. It could be that by increasing one's internal locus of control orientation his subjective evaluation (self-esteem) of himself may show a corresponding improvement.

In summary, the present study has studied the development of two dimensions of personality in Indian and white children. It should be noted that the Indian children utilized in the present study were attending Oklahoma public schools and may not be representative of Indian children from other states. Ethnic differences in self-esteem and locus of control orientation were found at three grade levels. The causes of these differences was not a concern of the present study, but was left for future researchers to identify. It was also found that internality was positively related to social or personal adjustment for both Indian and white children and, more importantly, that at the high school level this relationship was stronger for Indians than whites. This finding suggests that the strength of the relationship between certain personality variables may be a function of ethnicity or cultural background.

TABLE I

TEST FOR DIFFERENCE BETWEEN INDIAN AND WHITE SUBJECTS' NSLCS SCORES BY SEX

	Male					Female				
Category	N	X	SD	t	P	N	X	SD	t	P
Fourth Grade										
Indian	72	19.43	3.96	1.78	.05	63	19.56	3.69	2.29	.05
White	55	18.11	4.31			64	17.83	4.69		
Eighth Grade										
Indian	64	17.03	4.41	3.84	.01	85	16.16	4.78	2.29	.05
White	62	13.90	4.68			79	14.41	5.03		
Twelfth Grade										
Indian	56	11.79	4.88	1.24	n.s.	55	12.82	5.16	1.85	.05
White	50	10.56	5.33			58	10.98	5.43		

TABLE II

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN INDIAN AND WHITE SUBJECTS' CSEI AND NSLCS SCORES

Category	N	r	P	Z	P
Fourth Grade					
Indian	135	-.32	.01	.62	n.s.
White	119	-.39	.01		
Eighth Grade					
Indian	149	-.51	.01	.68	n.s.
White	141	-.56	.01		
Twelfth Grade					
Indian	111	-.55	.01	2.00	.05
White	108	-.34	.01		

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